

PROJECT DESCRIPTION

- I. GENERAL
THIS PROJECT INVOLVES INSTALLATION OF APS/CPS PEDESTRIAN EQUIPMENT ON THE NORTH AND WEST LEGS OF THE INTERSECTION OF MD 28 (DARNESTOWN ROAD) AT MD 112 (SENECA ROAD)/DARNESTOWN VILLAGE CENTER ENTRANCE IN MONTGOMERY COUNTY. MD 28 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.
- II. INTERSECTION OPERATION
THIS INTERSECTION OPERATES IN A NEMA FIVE-PHASE SEMI-TRAFFIC-ACTUATED MODE. THERE IS AN EXCLUSIVE/PERMISSIVE LEFT-TURN PHASE FOR WESTBOUND MD 28. THE DARNESTOWN VILLAGE CENTER ENTRANCE AND MD 112 APPROACHES OPERATE CONCURRENTLY. AN ALTERNATE PEDESTRIAN PHASE ACROSS THE WEST LEG OF THE INTERSECTION IS PROVIDED. A CONCURRENT PEDESTRIAN PHASE IS PROVIDED ACROSS THE NORTH LEG OF DARNESTOWN VILLAGE CENTER ENTRANCE.
- III. PEDESTRIAN OPERATION
NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTONS TO CROSS THE NORTH AND WEST LEGS OF THE INTERSECTION ARE TO BE PROVIDED. WHEN THE PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:
NORTH: "WAIT TO CROSS ENTRANCE AT DARNESTOWN. WAIT."
WEST: "WAIT TO CROSS DARNESTOWN AT SENECA. WAIT"
WHEN THE WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTACT PERSONS

THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

DISTRICT 3

MS. ANYESHA MOOKHERJEE (MD)
ASSISTANT DISTRICT ENGINEER - TRAFFIC
301-513-7404/301-513-7358

MR. VICTOR GRAFTON
DISTRICT ENGINEER - UTILITIES
301-513-7350

MR. DUANE BERNARD
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
301-513-7385

MR. THOMAS FOUNTAIN
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
301-513-7304

MONTGOMERY COUNTY

MR. ROBERT RICKETTS
TECHNICAL CENTER SUPERVISOR
PHONE NUMBER 240-876-3681

MR. KAMAL HAMUD
MONTGOMERY COUNTY-TRAFFIC ENGINEERING
PHONE NUMBER 301-777-8761

OFFICE OF TRAFFIC AND SAFETY

MS. CORREN JOHNSON
CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
CHIEF SIGNAL OPERATIONS
410-787-7650

MR. EUGENE BAILEY
CHIEF SIGN OPERATIONS
410-787-7670

MR. MIKE STOCKER
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)
410-787-7668

MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: MD 104.03-11, MD 104.04-13 THROUGH MD 104.04-16.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
900000	1	EA	VIDEO DETECTION INTERFACE EQUIPMENT: 1-8 CAMERAS

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
100000	1	EA	MAINTENANCE OF TRAFFIC (PER INTERSECTION)
201032	30	CY	CLASS 2 EXCAVATION
203030	2	CY	TEST PIT EXCAVATION
600000	90	LF	TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH
600000	20	LF	TYPE A CURB ANY HEIGHT OR DEPTH
655105	860	LF	5 INCH CONCRETE SIDEWALK
655120	60	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
800000	1	EA	2-WIRE HANDHOLE TO GRADE AND REPLACE FRAME AND COVER
800000	1	EA	ADJUST APS CENTRAL CONTROL UNIT
800000	4	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
800000	4	EA	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	2	EA	IP-BASED VIDEO DETECTION CAMERA & ANY LENGTH LEAD-IN CABLE
800000	4	EA	5 FOOT OR 10 FOOT PEDESTAL POLE WITH BREAKAWAY COUPLINGS, FOUNDATION & GROUND ROD
800000	1	EA	REMOVE & DISPOSE OF EXISTING SIGNAL EQUIPMENT (PER SIGNALIZED INTERSECTION LOCATION)
800000	70	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
800000	1	EA	THIRD PARTY CONCRETE TESTING (PER INTERSECTION)
802501	80	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
811001	1	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
860292	4	EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861105	820	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	840	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

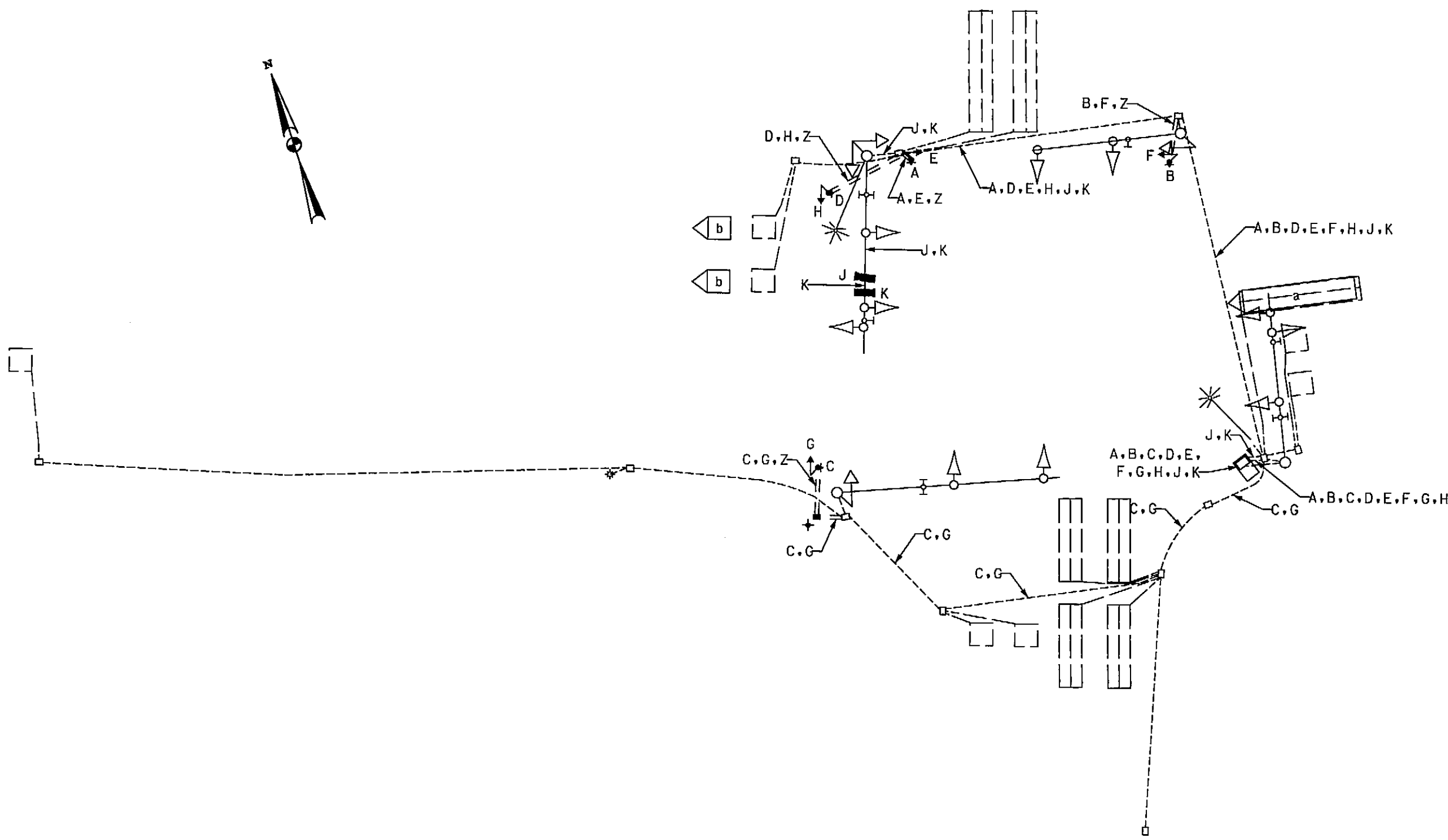
C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



WIRING KEY

- A,B,C,D ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
E,F,G,H ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
J,K VIDEO DETECTION CONTROL CABLE
Z NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
+ GROUND ROD

WIRING DIAGRAM



PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 2 & 5	+	+	G	R	R	R	R	R	R	R	WK	WK	DW	DW
2 & 5 CHANGE	+	+	G	R	R	R	R	R	R	R	WK	WK	DW	DW
PHASE 2 & 6	G	G	G	G	G	R	R	R	R	R	WK	WK	DW	DW
PED CLEAR	G	G	G	G	G	R	R	R	R	R	WK	WK	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW
PHASE ALT. 4 & 8	R	R	R	R	R	G	G	G	G	G	DW	DW	WK	WK
PED CLEAR	R	R	R	R	R	G	G	G	G	G	DW	DW	WK	WK
ALT. 4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 28 (DARNESTOWN ROAD) AT
MD 112 (SENECA ROAD)/DARNESTOWN VILLAGE CENTER ENTRANCE
DARNESTOWN, MARYLAND

GENERAL INFORMATION SHEET

SCALE	N.T.S.	ADVERTISED DATE	MARCH 2013	CONTRACT NO.	XY1515185
DESIGNED BY	AMH/JVB	COUNTY	MONTGOMERY		
DRAWN BY	JVB	LOGMILE	15002813.18		
CHECKED BY	JFL	TIMS NO.	L735		
F.A.P. NO.	-	TOD NO.	-		

TS NO. 2372G GI	DRAWING	SG-3	OF 3	SHEET NO.	24 OF 24
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